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NUTRITION ON AN INTERNATIONAL SCALE

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NUTRITION ON AN INTERNATIONAL SCALE

By LORD BOYD-ORR — (See Page 32)

Of the great advance in the different branches of science in the last forty years, none has been of more importance for the promotion of human welfare than the development in the science of nutrition. Where the new knowledge of nutrition has been applied, it has saved many millions from deficiency diseases and where not yet applied it holds out the hope of health and increased longevity for hundreds of millions more of the world's people. Although we now have the knowledge of the science of nutrition, we do not as yet have the means of getting it applied in all countries. In 1946 it was estimated that in view of the anticipated increase in population, the food supply of the world would need to be nearly doubled to provide for everybody a diet on the standard we now know to be necessary for full health and vigour (1). Though there is now a great surplus of food in North America, the world position with regard to food supplies is not so very different today.

With modern agricultural and engineering science it is physically possible to double or even treble the world food supply (2, 3, 4). To attempt to do that however raises economic and political problems of the first magnitude. Food is by far the most important article of trade; over 60 per cent of workers in the world are engaged in agriculture, the main output of which is food. The number of people dependent for their living on the production, processing, and distribution of food is greater than that of all other industries put together.

For the majority of families in the world, expenditure on food is more than 50 per cent of the family income. It is obvious then that big changes in the supply or price of food have inevitable economic repercussions. Then, even if the total world food supply were equated to human needs there would still be the problem which the United States now has, of getting it purchased and consumed. The food position of the world today is not unlike that of the United Kingdom in the early 1930s when there was a glut of food causing bankruptcy to farmers while at the same time a third of the population was suffering from nutritional disease due to lack of food. When we consider the great benefits which would accrue to the many millions of ill fed people and to farmers by the application of the new knowledge of nutrition, we must also consider the very real economic difficulties involved in getting this knowledge applied; and economics have political repercussions. The course of both national and international politics is largely determined by the pressure of conflicting economic interests, all of which would be affected to some extent by adjusting the production and distribution of

food to enable the fruits of research in nutrition to be enjoyed by all the people in the world.

While research in nutrition must continue because there is much yet to be learned, it is equally important that those interested in public health and social measures should, by publications such as *Borden's Review of Nutrition Research,* be made aware of the value of results being obtained and also be made to realize the difficulties in getting the results applied. In a recent issue of *Borden's Review of Nutrition Research,* Dr. Pett gave an excellent review of the role of nutrition in public health (5). Now, in the present article, the role of nutrition in the wider field of politics and economics is discussed. It may be of interest to consider first the role food has played in the evolution of human society.

Food the Physical Basis of Civilization

The food supply has been the most important factor in the evolution of human society. It was the discovery that seeds dropped in the ground can yield a harvest a few months later which changed food-gathering wandering tribes to food-producing settled communities which was the beginning of civilization. The advance from these primitive communities to the present highly complicated civilization was made possible by the increase in the food supply which enabled men to be free from agriculture to become craftsmen, tradesmen and administrators. The standard of living and degree of complexity of society in any country depends largely on the ratio of food producers to the total population. In the more primitive countries with a low standard of living, 80-90 per cent of the total population are engaged in agriculture. In the highly industrialized countries the work of 10 to 15 per cent of the population is sufficient to provide food, leaving 85 to 90 per cent for other forms of service to the community. It was the increase in the food supply by the development of agriculture which made possible the growth of the world population from probably about 5 million, when primitive settled communities began about 10,000 years ago, to 25,000 million today with our highly complicated social structure.

In practically all countries, in the old world at least, the growth of population has always tended to outstrip the increase in the food supply and failures of harvest have always been followed by famine, from the occurrence of which, in some areas, the world has never for any long period been free. The biggest famines in recent times have occurred in Asia, such as the one in India in 1769-70 where in Bengal 10 million people (a third of the population) perished, and one in India and China 1876-8 where in the two countries the deaths from starvation reached 14 millions (6). In Western Europe, famines, though not on such a large scale, were in the past probably as fre-

quent. In the British Isles there are reckoned to have been 201 famines since 10 A. D. (7). The number of deaths is unknown but in some cases it may have been considerable, like the one in France in 1709, when a million perished (8). Even with an average harvest there was seldom sufficient to provide abundance for the whole population. Hence, the struggle for food has been and for the majority of mankind, still is, the chief preoccupation. It is not without significance that in the Lord's Prayer the petition "Give us each day our daily bread" takes precedence even over the forgiveness of sins.

Food and Politics

The food supply has always been an important factor in politics. Scarcity and high prices of food create social unrest and resentment against the government. It was the food shortage in Paris due to the failure of the harvest of 1788 which led to the frenzy of the French Revolution which was precipitated by the march of the mob led by women to the Assembly demanding bread. When the members of the Assembly fled the mob stormed the Bastille. In the hungry forties of the nineteenth century the mobs in the industrial towns of England chanted "bread or blood" and the high price of food was the recurring theme in the speeches of the leaders of the Chartist movement to replace a government, elected by a privileged few, to a people's government which would make the welfare of the masses its first consideration. In the famine of Ireland of 1846 jurymen, at inquests on the cause of death of people found dead due to starvation, sometimes returned a verdict of "wilful murder against the Prime Minister of England" (9). The memory of the 1846 famine in Ireland in which 275,000 died of hunger and which was the main cause of the wholesale emigration which reduced the population of the country from about 8 to about 5 million contributed to the bitter and lasting hatred of the English government by the Irish.

Food shortage with resulting land hunger in the overpopulated countries of Asia is a contributory cause of the unrest and revolt against the rule of the white man and the spread of communism, with its promise of land for the people and the production for consumption by the people and not for the profit of landowners and others. The same trouble has arisen in Africa where the population has increased since 1900 from 120 to 200 millions while in some areas as in Kenya much of the best land has been taken over by white settlers. In British Guiana where recently the elected government was deposed and troops sent from Britain to quell the threatened revolution, the fundamental cause is the same. Dr. Hinden, a member of the Waddington Commission which recommended universal suffrage, said that in the last election "desperately poor people voted in all innocence for a party which promised more food, more homes, and more wages."

The masses of the people have little interest in politics, except in measures which affect their interest. If food is abundant and cheap with a rising standard of living (and for the poor the price of food is the main factor in the standard of living) they tend to be content under any form of government. If, however, they are suffering from poverty, of which hunger is the worst evil, it is easy for the demagogue to rouse the masses to revolt. *Political freedom has little appeal for the poverty stricken illiterate masses which form nearly half the world population, unless as a means of using a vote to get rid of the existing government.* As an American visiting Asia is reported to have said, "if you offered a hungry Asian Roosevelt's four freedoms or four hamburgers he would choose the hamburgers."

Government Action to Provide Food

In their own interests, governments have always tried to meet the food needs of their growing populations. In the old civilizations of Asia and Egypt they built great irrigation systems. In ancient Greece, the Spartans developed a military system which enabled them to conquer adjacent territory as did the Romans who drew food for the overcrowded imperial city from their conquered territories in Europe and North Africa. The Athenians established colonies and developed foreign trade, exchanging goods for food as did England, the population of which (England and Wales) increased from less than ten to over thirty millions in the nineteenth century, at the end of which it was importing about two-thirds of the food it consumed. Japan, which about 1870 began the same rapid growth of population, adopted the same policy of colonial expansion and foreign trade exchanging industrial products for food and raw material for its factories.

The political history of England in the nineteenth century affords a good example of the effect of food on social and political stability. During and after the Napoleonic war food was scarce and dear. The four-pound loaf rose to a shilling (10), while wages were only two to four shillings a day. There were mass meetings harangued by mob orators. The government called out the soldiers. In one fight "the battle of Peterloo" in 1819 there were twelve killed and hundreds wounded. This treatment enraged the people and the Chartist movement grew until in 1846 the leader claimed to have six million followers. The mob marched on London. The government wisely brought in the leaders of the revolt to talk things over and got the mob to disperse. In the same year, Peel, the prime minister, abolished the Corn Laws. Cheap food came pouring in from America and the Chartist movement faded out. By the end of the century food was so cheap that there was practically no hunger even among the poorest and the country had reached the highest degree of social and political stability.

In the economic crisis of the 1930s there was again the threat of hunger in England. The unemployment allowance was too low to enable families to purchase sufficient food and reduced purchases led to a "glut" of food supplies. There was a "hunger march" from the North of England to London. Stanley Baldwin, the prime minister, took the view that the two evils, a glut of food causing ruin to farmers and a scarcity of food causing hunger to workers should cancel each other out. The unemployment allowance was raised, with a big increase in the allowance for children; old age pensions were also raised, all of which increased purchasing power. Cheap or free milk was provided to children, with an extension of school meals. These steps put an end to hunger marches. In the United States the Food Stamp Plan, part of Roosevelt's New Deal, put the surplus food in the empty bellies to the benefit of the poor, the farmer and the shopkeeper, but, as in England, at the expense of the taxpayer.

It is interesting to note, that it was the abundant cheap wheat from America which saved England and other Western European countries, which were in the same condition, from revolution in the middle of the present century, though that thought may never occur to Americans. It was the well conceived Marshall Aid after the disastrous harvest of 1947 which halted the spread of communism in Western Europe.

I have intentionally emphasized the importance of hunger as a political force in revolt against a government or economic system under which it exists, because it is of major importance in the ideological conflict between capitalism and communism. That issue will in the end be decided, not by politicians, but by the masses of the people. With more than half the people in the world unable to get sufficient food for health, and now believing that it can be produced in abundance, the form of government which they think can produce it quickest will gain their allegiance. It should not be forgotten that communism was born of hunger. It was in the "hungry forties" that Karl Marx in England issued the communist manifesto (1847), and it is among the hungry poverty stricken people that it comes as a gospel of hope. The means being taken by the United States and other countries in providing food and developing agriculture which will help to stop the march of communism in "food deficit" countries is referred to later.

Food and Economics

Since 1938 there has been a tremendous increase in industrial potential. In the United States and Canada, which were outside the battle areas, many industries have doubled their capacity for output. In Western Europe, where many factories were destroyed, production is already from 25 to over 50 per cent above the pre-war level. Countries like the Argentine and Australia

which were formerly content to be almost entirely primary producers are now being rapidly industrialized. Industrialization is also proceeding apace in Asia. Russia which has built up its industries at an unprecedented rate is now beginning to export industrial goods to Western Europe. According to a press report (Reuter), it is making a deal with Egypt for the export of motor cars, machinery, locomotives and consumer goods. There is already a world wide fight for markets and fear of a recession with unemployment. If there were a lessening of international tension and a slowing down of rearmaments, on which some nations are spending 10 to over 30 per cent of their national revenue, the resulting fall in the market for weapons of war would make the danger of a recession all the greater.

It has been suggested that as rearmament slows down, as it must unless war is inevitable, the money being spent by governments on rearmaments might be devoted to internal development such as better roads, schools and housing to maintain full employment. I cannot speak for the United States but I can say that in Britain this would be impossible. In the highest income groups, income and surtax take 80 per cent of the income and death duties 80 per cent of the estate left by the deceased and it is estimated that the number of people with a net income after taxation of £5,000 (about 14,000 dollars at present rate of exchange) has fallen since the war from over a thousand to thirty-six. People spending more than that are living on their capital, or by great ingenuity are managing to evade the tax collector. A suggestion that taxation at the present level, which is tolerated with extreme reluctance for defense, should be continued to pay for social developments or public works to prevent unemployment would be considered economic lunacy. If the government market for weapons of war, on which some engineering firms depend for half their output, suddenly failed there would be widespread unemployment and economic distress unless there were an increased market for goods which the industries could produce in place of armaments. Even with so large a part of the industrial potential devoted to arms for which there is a present market, one of the biggest problems of governments is to find an export market for the part of the industrial power not engaged in armaments.

If the armaments race is to slow down, there must be a big increase in the world market for goods other than arms in order to prevent a recession. This is a world wide problem. As Wendell Wilkie said, "we are now one world with the economic fortunes of all countries interdependent." The only and inevitable solution is a great increase in the world market. Let us consider how a world food policy based on the newer knowledge of nutrition would contribute to the necessary rapidly expanding world economy.

A World Food Policy, Based on Human Needs as a Basis for Economic Prosperity

Food must be regarded as being in a different category from most other goods in so far as it is a daily necessity for life and it is a primary duty of governments to see that there is sufficient food for the people they govern. That has always been an accepted principle of good government. In mediaeval times in England, Lords were given grants of land by the King with power to administer the law within their domains and the powers carried with it the responsibility for the food supply. The word "Lord" is derived from the Anglo saxon "hlaford" which means the loaf or bread warder — the man whose first duty was to see that his people had bread. Power has passed from the lords to central governments and the responsibility for the food supply must go with the power. Under the American Constitution every citizen has the right to life, liberty and the pursuit of happiness. Life is rightly put first because without it he cannot enjoy the other two and for life his daily bread is the first essential. When food and other necessities of life can be made available, and people through no fault of their own are hungry, they are within their rights in being rebels against those in power. If nations with colonial possessions had carried out the responsibilities of the Lords of mediaevel times in England, it would have been much more difficult for demagogues or communists to rouse the masses in the colonial possessions to revolt against the rule of the white man.

The acceptance by governments of the responsibility for seeing that there is sufficient for the people does not involve the necessity for bureaucratic control of the production or trade in food as in Russia. It can probably be done more efficiently, and certainly in a way to make life more interesting, by freedom of enterprise, the government intervening only when necessary to ensure that the nation's food supply is adequate and that food producers have a fair deal, as indeed is the practice of all good governments. The new situation which has arisen by the shrinking of the world is that it has become necessary to do it on a world scale. If governments consider it their duty to combine their forces to ensure that all people will enjoy political freedom it is surely an equal duty to combine their resources to ensure that all people have sufficient food to live their full alloted span of life to enjoy that freedom.

Apart from the question of justice, this has become economically desirable. In the economic crisis of the early 1930s there was a glut of food in both the United States and Britain, with, for a time, food being destroyed and land going out of cultivation while at the same time there were in both countries millions suffering in health for the lack of food. That will never happen again within a well governed country, but it is happening in the world which is now smaller than what a country was fifty years ago. As will

be seen later, attempts have been made to evolve a world food policy which would be in the interests of all nations. Things are moving towards that end, which in the opinion of the writer is inevitable.

A world policy must above all else be based on human needs. Until about thirty years ago the standard of human needs was regarded as a sufficient amount of any kind of palatable food to satisfy hunger. Some still consider that as a standard, and express satisfaction that last year food production estimated in calories had now caught up with the increase in population, and that the people of the world were as well fed as in 1938. But in 1938, it was estimated that about two-thirds of the people in the world suffered from malnutrition and many millions from occasional hunger. The food standard must be sufficient both in quantity and in quality to maintain full health and vigour. That is the standard used by farmers for their flocks and herds, because it is the one which yields the biggest profits. We cannot contemplate a lower one for human beings.

On that standard, taking into account the anticipated increase in population, it has been estimated that the world food supply would need roughly to be doubled in the next twenty-five years and the increase would be mainly in vegetables, fruits and animal products, the latter yielding only about a tenth of the calories per acre which cereals yield. With modern engineering and agricultural technology, there is no physical difficulty in doubling the world food supply. Soil erosion which is believed to have destroyed or damaged about half of the original fertile areas of the earth would need to be halted by vast forestation projects on every continent and the destructive force of river floods converted by projects like the T.V.A. to hydro-electric power and irrigation. Deserts once fertile would need to be reconditioned. These projects, some of which are already being carried out in different parts of the world, together with the need for millions of tractors and other agricultural equipment to modernize primitive agriculture, and the setting up of the necessary secondary industries for the maintenance of equipment and road and rail means of transport for food, would demand enormous quantities of industrial products. Then, as agricultural products increased, the enhanced purchasing power of the 60 per cent of the families in the world engaged in agriculture would provide an expanding market for consumer goods. Thus a world food plan, based on human needs, would provide a greatly increased world market for industrial products. As the creation of wealth, in this case beginning with food, is a cumulative process, it would contribute to the rapidly expanding world economy which is needed to balance the growing industrial potential and also to take up the slack as rearmaments slow down, and so keep the wheels of industry turning with full employment and economic prosperity.

Though a world development plan based on food would yield beneficial results, initiating and carrying out this program raises difficult economic problems and poses questions such as: How is the necessary long term investment capital to be found? What yield on the capital can be expected? How can a world market be regulated to prevent violent fluctuations in prices with unmarketable surpluses piling up in some centres? These problems have been studied and solutions suggested by organizations advocating a world food plan. Before referring to these, let us consider the present world food position which must be the starting point.

The World Food Position

Food can be regarded as a trade commodity to be produced for sale. In that case when there is too much food in some countries the resulting fall in prices threatens agricultural depression and economic ruin. The United States has surpluses now totalling 5,000 million dollars. Canada and Australia have surplus wheat; in the latter country where it is a main export it amounts to 60 million bushels. Burma is economically embarrassed because it cannot find a remunerative market for surplus rice. On the other hand in most countries, including the United Kingdom where some foodstuffs in short supply are still rationed, there is a shortage of food, and owing to the lack of foreign exchange it is impossible to meet their needs from the countries with unmarketable surpluses.

The world position today is not unlike that in the United States and the United Kingdom in the early 1930s when there were unmarketable surpluses depressing agriculture and at the same time scarcity of food among millions of unemployed owing to lack of purchasing power. As indicated before, government measures had to be taken then to adjust the supply to the needs of the people. The world has continued to shrink since the 1930s and nations have become more and more dependent on each other.

It is recognized that peace is indivisible and that aggression in any part of the world threatens all countries. It is now almost as true that economic prosperity is indivisible. World markets are the common concern of all countries. In these conditions international measures to deal with food seem as necessary as the national measures of twenty years ago. Indeed all governments now consider their national plans in the light of total world supplies and requirements.

As the widely circulated excellent statistics of the F.A.O. (Food and Agricultural Organization of the U. N.) are available to anyone interested, a short general statement is sufficient for this article. Owing to the devastation in the last world war, food production in Europe and in Asia fell. The increase in the output of North America, where food production increased

by over 40 per cent, saved millions from famine. By 1950, five years after the war, food grains in Europe had reached the prewar level, but in spite of the increase in the United States and the British Commonwealth countries the world supply had not caught up with increase of population as is shown in the following table (11).

	Amount available per head	
	pre-war	1950
Wheat	100	98
Rice	100	89
Rye	100	83
Beans and Peas	100	98
Sugar	100	110

Increase in the production of meat and dairy products lagged behind cereals. In the United Kingdom for example there is now a glut of cereals while meat and dairy products are still rationed. The biggest shortage compared with the first pre-war level is in Russia when during the famine, cattle were killed and where in 1945 the retreating German armies are said to have killed what they could not use or drive off.

In 1952-53, for the first time since the war, food production, reckoned in calories, increased as fast as the population (12), but owing to lack of purchasing power of the food deficit countries, which is accentuated by the division of the world in dollar and sterling areas, the distribution of food is more uneven than before the last war. Nearly every country is now embarrassed either by surpluses or deficits and is considering various government measures to deal with its own aspects of the problem. The political and economic advantage of dealing with the problem by international measures rather than by conflicting and separate national measures has been recognized and attempts have been made to get international cooperation. It is interesting to note here, that from the beginning of the movement for a world food policy, the estimates for the necessary supply have been based on the requirements for health. This should afford satisfaction to all those whose arduous research work showed the importance of food for health and revolutionized our ideas of food requirements. The use of health as a standard rather than calories increases the potential market for food. In the United States during the war, when there was full employment with good wages, the consumption of the more expensive foods of high nutritive value increased in the case of meat, eggs, and milk from 15 to 18 per cent and to an even greater extent

in fruits and vegetables. In the United Kingdom, where during the war liquid milk was subsidized to bring it within the purchasing power of even the poorest, milk consumption was increased by 50 per cent. If such increases in consumption can occur in these wealthy countries with a high standard of living, what an enormous potential market there is in a world where it is reckoned that two out of every three suffer from malnutrition and occasional hunger.

The Growth of a Movement for a World Food Plan

The honor of being the first to try to get international cooperation in agriculture belongs to an American, David Lubin, who believed that agricultural prosperity was the basis of economic prosperity. In 1905 he founded the International Institute for Agriculture in Rome which did, though on a much smaller scale, pretty much the same work as F.A.O. now does.

The country which first introduced the world food problem to international politics was Yugoslavia, which in 1925 proposed that the Health Organization of the League of Nations should examine and report on it in all its aspects. The report in 1935 gave the first account of the extent of hunger and malnutrition in the world.

In 1935 when economists and politicians were devising measures to reduce production and set up barriers to the distribution of food to get rid of the "glut," Mr. Bruce, now Viscount Bruce, a former Prime Minister of Australia and a distinguished economist and financier, along with Earl de la Warr, initiated a discussion on food in the Assembly of The League. They argued that increasing food production to meet human needs would bring prosperity to agriculture, the biggest world industry, and bring about economic prosperity with a great increase in international trade. After a three-day debate it was decided to set up a committee of nutrition experts to draw up a standard of human needs. The committee, under the chairmanship of Sir Edward Mellanby, included scientists from a number of countries including Russia. The American delegates were Dr. W. H. Sebrell and Dr. Hazel Stiebling (14).

When the report of this committee was received a committee of economists, agricultural and nutrition experts was set up with Lord Astor as chairman and with Mr. David Lubbock as his assistant to make recommendations on the production, transport and trade in food (15). When the report of the committee was published in 1937, representatives of twenty-two nations met in a conference to consider how they could cooperate to carry out its recommendations. The outbreak of war in 1939 brought this movement to an end.

During the second world war, President Roosevelt made his declaration

of the Four Freedoms including freedom from want. It was suggested to President Roosevelt that as food is the first want it would form a good starting point. Acting on this suggestion, he invited the nations to send representatives to the Hot Springs Conference in 1944 to consider ways and means of getting international cooperation to abolish hunger and raise the standard of living of the people working on the land. Out of that Conference arose F.A.O., the first Organization of the United Nations.

The first work of F.A.O. was to prepare an appraisal of the then world food position. This showed that it was much worse than governments thought. The Director invited the main food exporting and importing countries to send delegates to Washington to consider joint action to prevent widespread famine in certain areas. The Conference agreed to set up the International Emergency Food Council with representatives of the 34 main food exporting and importing countries to get agreed measures for increasing production and to get food coming on the world market distributed to countries in proportion to their need and to regulate world prices to prevent a steep rise owing to the scarcity. That council, financed and staffed by F.A.O. with M. Fitzgerald as its secretary, did a magnificent job from 1946 to 1948 by which time the post-war food crisis was past.

The immediate problem having been dealt with, the Director general submitted to all governments proposals for a world food plan to deal with the long range problems of food and agriculture (16). The main feature of the plan was to combine the resources of F.A.O., the Economic and Social Council, and the Bank for Reconstruction and Development under an International Authority for the following functions:

(1) To give technical assistance and long term loans for the purchase of the necessary industrial products to food-deficit countries asking for assistance to develop agriculture and allied industries.

Loans given by the suggested international authority to whose funds every nation should subscribe, even though it be only a token subscription, should be on a business basis, though on a generous footing, interest payments to be started as soon as the resources of the country receiving the loan were developed to the extent that hunger and gross poverty were abolished. Grants given as charity cause a feeling of humiliation and resentment against the giver.

(2) To build up a world reserve of storable food and other agricultural products from unmarketable surpluses after a bumper harvest in any area and release from the reserve after a bad harvest and by this and other means help to stabilize prices in the world market within given limits which could be changed, but by never more than say 5 per cent in any one year in order to adjust the supply of each commodity to requirements, thus giving farmers

a guarantee against another slump such as occurred after the first world war and giving every country a world guarantee of a market for export and a guarantee of supply for imports at a fair price to both producers and consumers.

(3) International trade in agricultural production to be carried on through the normal business channels, the Board intervening only when necessary to ensure adequate supplies and prevent violent fluctuations in prices.

A Conference in Copenhagen, convened to consider the proposals, approved them in principle and a committee with Viscount Bruce as chairman was appointed to go into them in greater detail and make recommendations. Though many governments were prepared to cooperate, a few were not willing to give the necessary funds and power to the proposed international authority.

Since that time events have shown that the work then suggested for the World Food Board is necessary. F.A.O. has done excellent work in giving technical assistance and in other ways, but it has neither the funds nor the authority to do all that is needed. The World Bank for Reconstruction and Development has given loans for the development of agriculture and some governments have acted independently. Under President Truman's Point Four Plan the United States has given technical assistance and grants of money for the development of agriculture in food deficit countries. The British Commonwealth "Colombo Plan" is doing the same for countries in southwest Asia. The U.S.S.R. has now entered this field and is giving technical assistance to Egypt. The United States, Canada and Australia have supplied wheat to Pakistan, to relieve a shortage due to a bad harvest. And according to a British press report, President Eisenhower is considering measures to deal with surpluses and sending missions to Asia, Africa, and South America to explore possibilities of extending international trade in food, and the Secretary of Agriculture and the Secretary of State are to begin an exchange of views with foreign ministers on subjects affecting surpluses and stock piles.

The fundamental importance of the world food supply for social contentment and economic prosperity is now fully recognized and owing to the action being taken jointly through F.A.O. and independently by governments, there is likely to be a steady improvement in the world food position. All that is now being done could however be done more efficiently and without any suggestion of political strings if it were done by an international authority under the supervision of the United Nations and centered on F.A.O. which was established for that work.

It has been suggested by the writer (1949) (17) and later by a group

of British Members of Parliament headed by Mr. Harold Wilson, former Minister for Trade, that the nations might cooperate through an international authority to abolish hunger and poverty, each contributing a percentage of what it is spending on armaments which would be reduced by that percentage. This would be a good way of slowing down the armaments race and promoting the expanding world economy needed to prevent a recession due to decrease in the arms industry. If one of the great powers proposed such a plan the government which refused to cooperate would find it difficult to rebut the accusation of being more interested in world domination than in the welfare of the people of the world including its own citizens.

In the opinion of the writer, in this now small world, international cooperation to apply science to the promotion of the welfare of all mankind is the only alternative to war. There could be no better starting point of cooperation than on a food policy based on human needs. If a world food policy on that basis were adopted it would afford great satisfaction to those whose researches have established the health standard of needs, to know that as a result of their work a thousand million of their fellow men will be free from malnutrition and enjoy a fuller and longer life and that the necessary increased food production will contribute to economic prosperity of benefit to all nations. Thus the advance in the science of nutrition can be of greater benefit to mankind than the more spectacular advance in physics which released the hydrogen bomb.

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ABOUT THE AUTHOR

Borden's Review of Nutrition Research is privileged in this issue to present the views of Lord John Boyd-Orr, who has worked toward a better-fed world for well over half a century.

He was born in 1880 at Kilmaurs, Ayrshire, Scotland. He received M.A., M.D. and D.Sc. degrees from the University of Glasgow. In addition, he has been awarded honorary degrees from renowned universities on every continent. He was named rector of the University of Glasgow in 1945 and became chancellor in 1946.

His writings include "The National Food Supply"; "Food, Health and Income"; "Food and the People"; and a number of articles in scientific journals. He was chosen Director-General of United Nations Food and Agricultural Organization in 1945, and served in that post until 1948.

In 1949 he was awarded the Nobel Peace Prize, which was considered to be for his work toward world federalism as well as for his leadership in the F.A.O. And in the same year King George VI created him First Baron of Brechin Mearns in the county of Angus.

His recreation is farming.